

Claims

1. A bearing for the blade assembly of the cooling fan, the bearing is made of the plastic steel material having an integrally formed cylindrical hollow body and outward extended large diameter seat, said the seat has a recess
5 with threaded wall on the bottom for housing a powerful magnet, the body has a cavity which extends upward to form a plurality of claws with project point at the claw tip, said the bearing will be inserted in the hub of the blade assembly and the rotor shaft is held in the cavity of the bearing and the project point of the claws will catch the round grove on the rotor shaft;
10 when the magnet is attracting the rotor shaft, the rotor shaft keeps a vertical line in cavity to gain a self-adjusting balance and rotation in the suspended manner.
2. The bearing structure for the blade assembly of the cooling fan as claimed in the Claim 1 in which the seat has skew conical bevel with a diameter
15 larger than the body.
3. The bearing structure for the blade assembly of the cooling fan as claimed in the Claim 1 in which the body extends upward to form a plurality of claws but with smaller diameter than the body.
4. The bearing structure for the blade assembly of the cooling fan as claimed
20 in the Claim 1 in which the cavity is a blind hole having a closure on the seat.

5. The bearing structure for the blade assembly of the cooling fan as claimed in the Claim 1 in which the cavity has a hole linked to the recess and the magnet contained in the recess exposes to the cavity.
6. The bearing structure for the blade assembly of the cooling fan as claimed in the Claim 1 in which the width of the round grove on the rotor shaft is wider than the width of project point of the claw.
7. The bearing structure for the blade assembly of the cooling fan as claimed in the Claim 1 in which the project point of the claws is aligned to the center of round groove and there is a clearance of 0.1mm between the project point and the center of the round groove.